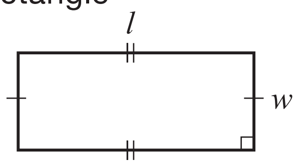
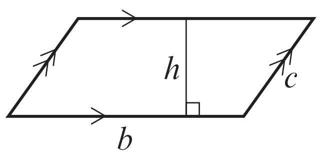
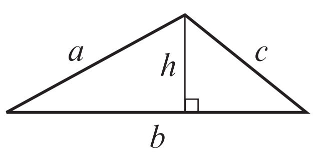
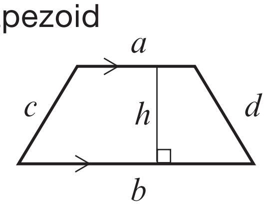
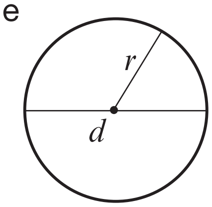
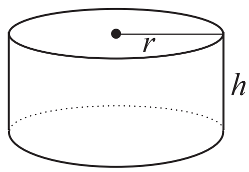
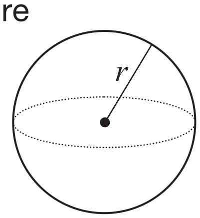
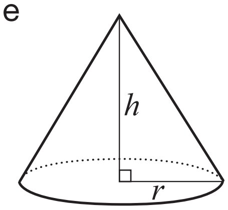
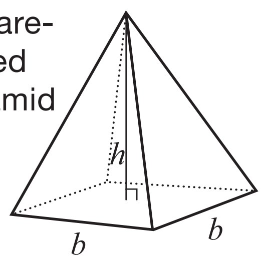
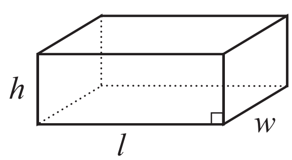
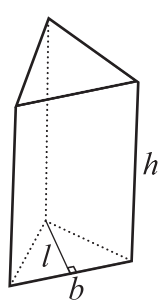
Formula Sheet

Grade 9 Applied

Geometric Figure	Perimeter	Area
Rectangle 	$P = l + l + w + w$ or $P = 2(l + w)$	$A = lw$
Parallelogram 	$P = b + b + c + c$ or $P = 2(b + c)$	$A = bh$
Triangle 	$P = a + b + c$	$A = \frac{bh}{2}$ or $A = \frac{1}{2}bh$
Trapezoid 	$P = a + b + c + d$	$A = \frac{(a+b)h}{2}$ or $A = \frac{1}{2}(a + b)h$
Circle 	$C = \pi d$ or $C = 2\pi r$	$A = \pi r^2$

Geometric Figure	Volume
Cylinder 	$V =$ (area of base)(height) $V = \pi r^2 h$
Sphere 	$V = \frac{4}{3}\pi r^3$ or $V = \frac{4\pi r^3}{3}$
Cone 	$V = \frac{\text{(area of base)(height)}}{3}$ $V = \frac{1}{3}\pi r^2 h$ or $V = \frac{\pi r^2 h}{3}$
Square-based pyramid 	$V = \frac{\text{(area of base)(height)}}{3}$ $V = \frac{1}{3}b^2 h$ or $V = \frac{b^2 h}{3}$
Rectangular prism 	$V =$ (area of base)(height) $V = lwh$
Triangular prism 	$V =$ (area of base)(height) $V = \frac{1}{2}blh$ or $V = \frac{blh}{2}$